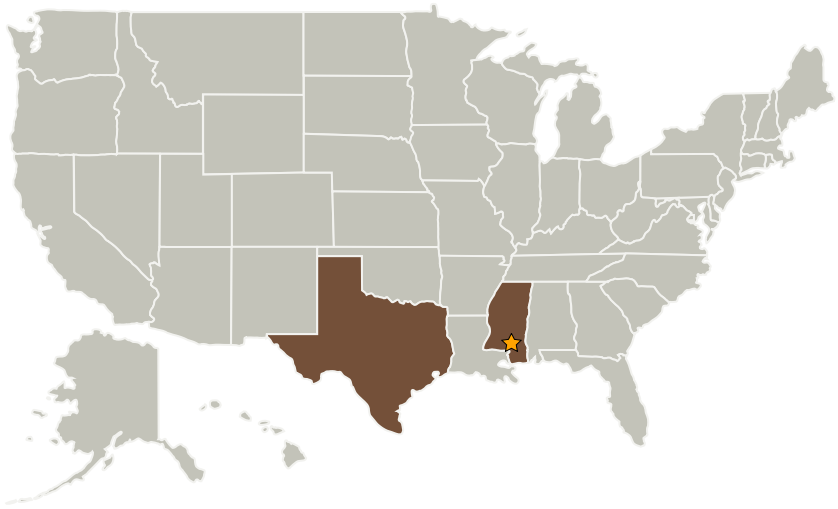
Software Defined Radio (SDR) Overlay Node Gateway, Phase I

Completed Technology Project (2005 - 2005)

Project Introduction

This proposal details a novel mobile data transceiver solution that supports standalone wireless sensors and concurrently acts as a gateway between multiple sensor webs. This innovation uses Software Defined Radio (SDR) technology to communicate with a variety of sensor technologies using many different radio waveforms and communication protocols. The proposed system is designed to be adaptable to mission requirements and all aspects of its operation can be remotely modified after deployment. When possible, the solution uses commercial of the shelf technology (COTS) components and incorporates open data operability standards for information visualization.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Stennis Space Center(SSC)	Lead Organization	NASA Center	Stennis Space Center, Mississippi
Whereabout LP	Supporting Organization	Industry	Universal City, Texas

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Stennis Space Center (SSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations	
Mississippi	Texas

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Jason Scarlett

Technology Areas

Primary:

- TX12 Materials, Structures, Mechanical Systems, and Manufacturing
  - TX12.2 Structures
    - TX12.2.3 Reliability and Sustainment